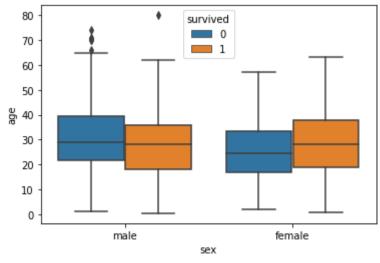
```
import pandas as pd
          import seaborn as sns
          import matplotlib.pyplot as plt
          import numpy as np
          df = sns.load_dataset('titanic')
In [3]: df
             survived pclass
                             sex age sibsp parch
                                                     fare embarked
                                                                    class
                                                                           who adult_male deck embark_town alive alone
Out[3]:
                         3 male 22.0
                                                0 7.2500
                                                                    Third
                                                                                     True NaN Southampton no False
                                                                                               Cherbourg yes False
                         1 female 38.0
                                                0 71.2833
                                                                    First woman
                                                                                    False
                                                                                            С
          2
                         3 female 26.0
                                                0 7.9250
                                                                    Third woman
                                                                                               Southampton yes True
                                                                                    False
                                                                                          NaN
                                                                     First woman
          3
                         1 female 35.0
                                                0 53.1000
                                                                                               Southampton yes False
                                                                                     False
                                                                    Third
          4
                         3 male 35.0
                                                0 8.0500
                                                                                               Southampton
                                                                           man
                                                                                                            no True
         886
                         2 male 27.0
                                                0 13.0000
                                                                S Second
                                                                                     True NaN Southampton no True
                                                                          man
                                                                                               Southampton yes True
                         1 female 19.0
                                                0 30.0000
                                                                    First woman
                                                                                     False
                                                                    Third
                                                2 23.4500
         888
                         3 female NaN
                                                                         woman
                                                                                    False
                                                                                                Southampton
                                                                                                            no False
                                                                                                Cherbourg yes True
                         1 male 26.0
                                                0 30.0000
                                                                     First
                                                                           man
                                                                                     True
                         3 male 32.0
                                                0 7.7500
                                                                    Third
                                                                                     True NaN
                                                                                               Queenstown no True
         890
                                                                           man
        891 rows × 15 columns
In [4]:
         df.head()
                           sex age sibsp parch
Out[4]:
                                                   fare embarked class
                                                                        who adult_male deck embark_town alive alone
                                             0 7.2500
                           male 22.0
                                                              S Third
                                                                                       NaN
                                                                                            Southampton
                                                                                                         no False
                                              0 71.2833
                                                                                                        yes False
                       1 female 38.0
                                                              C First woman
                                                                                 False
                                                                                              Cherbourg
                                                                                         С
         2
                       3 female 26.0
                                              0 7.9250
                                                              S Third woman
                                                                                       NaN
                                                                                            Southampton
                       1 female 35.0
                                              0 53.1000
                                                                                         C Southampton
                                                              S First woman
                                                                                 False
                                                                                                        yes False
                       3 male 35.0
                                              0 8.0500
                                                              S Third
                                                                                  True NaN Southampton
                                                                      man
In [5]:
         df.tail()
Out[5]:
                             sex age sibsp parch fare embarked
                                                                  class
                                                                         who adult_male deck embark_town alive alone
                         2 male 27.0
                                                0 13.00
                                                              S Second
                                                                                   True NaN Southampton
                                                                                                          no True
         887
                         1 female 19.0
                                                0 30.00
                                                                  First woman
                                                                                           B Southampton
                                                                                                         yes True
                                                              S Third woman
                                                2 23.45
                         3 female NaN
                                                                                              Southampton
                                                                                                           no False
                                                0 30.00
                         1 male 26.0
                                                                   First
                                                                                                Cherbourg
                                                                                                        yes True
                                                                         man
         890
                         3 male 32.0
                                                0 7.75
                                                                  Third
                                                                         man
                                                                                        NaN
                                                                                              Queenstown
                                                                                                           no True
         df.info()
         <class 'pandas.core.frame.DataFrame'>
         RangeIndex: 891 entries, 0 to 890
         Data columns (total 15 columns):
          # Column
                           Non-Null Count Dtype
         ---
                           -----
          0 survived 891 non-null int64
              pclass
                           891 non-null
                           891 non-null
                                            object
                           714 non-null
              age
                                            float64
                           891 non-null
                                           int64
              sibsp
                           891 non-null
                                           int64
              parch
                           891 non-null
                                            float64
              fare
              embarked
                           889 non-null
                                           object
              class
                           891 non-null
          8
                                           category
                           891 non-null
          9
              who
                                           object
                           891 non-null
          10
             adult_male
                                           bool
          11
              deck
                           203 non-null
                                           category
             embark_town 889 non-null
          12
                                           object
          13 alive
                           891 non-null
                                           object
          14 alone
                           891 non-null
                                           bool
         dtypes: bool(2), category(2), float64(2), int64(4), object(5)
         memory usage: 80.7+ KB
In [7]:
         df.describe()
                                                 sibsp
                                                          parch
                                                                      fare
Out[7]:
                 survived
                            pclass
                                        age
         count 891.000000 891.000000 714.000000 891.000000
                                                      891.000000 891.000000
                0.383838
                          2.308642
                                   29.699118
                                              0.523008
                                                        0.381594
                                                                 32.204208
           std
                0.486592
                          0.836071
                                   14.526497
                                              1.102743
                                                        0.806057
                                                                 49.693429
                0.000000
                          1.000000
                                    0.420000
                                              0.000000
                                                        0.000000
                                                                  0.000000
          min
                0.000000
                          2.000000
                                   20.125000
                                              0.000000
                                                        0.000000
                                                                  7.910400
          50%
                0.000000
                          3.000000
                                   28.000000
                                              0.000000
                                                        0.000000
                                                                 14.454200
                 1.000000
                          3.000000
                                   38.000000
                                              1.000000
                                                        0.000000
                                                                 31.000000
                1.000000
                          3.000000
                                   80.000000
                                              8.000000
                                                        6.000000 512.329200
          max
In [8]:
          sns.boxplot(x='sex', y='age', data=df)
         <Axes: xlabel='sex', ylabel='age'>
Out[8]:
           80
           70
           60
           50
           30
           20
           10
                                            female
                       male
                                   sex
          sns.boxplot(x='sex', y='age', data=df, hue='survived')
```

<Axes: xlabel='sex', ylabel='age'> Out[9]:



In [11]: print("Number of peoples survived:-> ", df['survived'].value\_counts()[1]) print("Number of peoples Not survived:-> ", df['survived'].value\_counts()[0])

Number of peoples survived:-> 342 Number of peoples Not survived:-> 549

In [ ]: